155485

Please distribute to the following:

100/300 AREA UNIT MANAGER MEETING ATTENDANCE AND DISTRIBUTION

NAME	E-MAIL ADDRESS	MSIN	COMP
Childers, Heather	Original +1 copy	H6-08	ADREC
Charboneau, Briant L	Briant_L_Charboneau@rl.gov	A6-33	DOE
French, Mark	Mark_S_French@rl.gov	A6-38	DOE
Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO
Gadbois, Larry E	Gadbois.larry@epa.gov	B1-46	EPA
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH
Long, Heather	halong@wch-rcc.com	H4-10	WCH



100/300 AREA UNIT MANAGERS MEETING APPROVAL OF MEETING MINUTES

OCTOBER 14, 2010

APPROVAL:	Jep Mak	Date	11/4/10
£	Mark French, DOE/RL (A3-04) River Corridor Project Manager		
APPROVAL:	Briant Charboneau, DOE/RL (A6-33)	Date	11/4/2010
	Groundwater Project Manager		
APPROVAL:	Nina Menard. Ecology (H0-57) Environmental Restaurtion Project	Date	11/4/2010
	Environmental Restoration Project Manager		
APPROVAL:	Laura Buelow, Rod Lobos, or Christopher	Date	4/4/10
	Guzzetti, EPA (B1-46) 100 Area Project Manager		
APPROVAL:	Larry Stadlons	Date	Nov 4, 2010
	Larry Gadbois, EPA (B1-46) 300 Area Project Manager		

100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater and Source Operable Units; Facility Deactivation, Decontamination, Decommission, and Demolition (D4); Interim Safe Storage (ISS); and Mission Completion

October 14, 2010

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) The next meeting will be held November 4, 2010, at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, Room C209.
- Attendees/Delegations Attachment A is the list of attendees. Representatives from each agency
 were present to conduct the business of the UMM. Attachment B documents any delegations
 received from the agencies.
- <u>Approval of Minutes</u> The September 9, 2010, meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status The status of action items was reviewed and updates were provided (see Attachment C).
- Agenda Attachment D is the meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

<u>Executive Session</u>: An Executive Session was held by RL, EPA, and Ecology prior to the October 14, 2010, UMM. Attachment E is the meeting agenda.

Agreement 1: Attachment 1 documents RL, EPA, and Ecology approval of the policy for "Hanford Cleanup Actions Below the Ordinary High Water Mark."

100-F & 100-IU-2/100-IU-6 AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. Attachment 3 provides a schedule and map showing the status of remediation at 100-IU-2 and 100-IU-6. No issues were identified and no action items were documented.

Agreement 1: Attachment 4 documents EPA approval for waste staging areas for the 100-F remediation activities.

100-D & 100-H AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. Attachment 5 provides status and information for D4/ISS at 183-H. No issues were identified and no action items were documented.

Agreement 1: Attachment 6 documents Ecology approval that backfill may be performed in a limited portion of the 118-H-6:4 subsite.

Agreement 2: Attachment 7 documents Ecology approval for an additional staging pile area for the 132-D-1 waste site.

Agreement 3: Attachment 8 documents Ecology approval for an additional staging pile areas and ramps at the 132-H-1 and 132-H-3 waste sites.

100-N AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. Attachment 5 provides status and information for D4/ISS at 100-N. No issues were identified and no agreements or action items were documented.

100-K AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. No issues were identified and no agreements or action items were documented.

100-B/C AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. Attachment 9 provides a photo, schedule, and map showing the status of remediation at 100-C-7. No issues were identified and no agreements or action items were documented.

300 AREA - 618-10/11 (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. No issues were identified and no agreements or action items were documented.

300 AREA - GENERAL (GROUNDWATER, SOILS, D4/ISS)

Attachment 2 provides status and information for groundwater. Attachment 10 provides status and information for D4/ISS at 300 Area. No issues were identified and no agreements or action items were documented.

REGULATORY CLOSEOUT DOCUMENTS OVERALL SCHEDULE

Attachment 11 provides a summary of the procedure discussed at a September 14, 2010, meeting on "WAC-173-340-740(7)(e)(1996) Implementation." Ecology will review and comment on the summary for possible agreement at the next UMM. No issues were identified and no agreements or action items were documented.

MISSION COMPLETION PROJECT

Attachment 12 provides status or information regarding the Orphan Sites Evaluations, Long-Term Stewardship, River Corridor Baseline Risk Assessment, the Remedial Investigation of Hanford Releases to the Columbia River, and a Document Review Look-Ahead. No issues were identified and no agreements or action items were documented.

5-YEAR RECORD OF DECISION ACTION ITEM UPDATE

Update from Ecology to the Five-Year Review Action Item List. No issues were identified and no agreements or action items were documented.

Attachment A

100/300 AREA UNIT MANAGER MEETING ATTENDANCE AND DISTRIBUTION

October 14, 2010

NAME -	E-MAIL ADDRESS	MSIN	COMP	SIGNATURE SAME ASSESSED.
Childers, Heather	Original +1 copy	H6-08	ADREC	
Balone, Steven N	steven.balone@rl.doe.gov	A3-04	DOE	on and substitution of the
Ceto, Nick	nick.ceto@rl.doe.gov	A7-50	DOE	
Chance, Joanne C	joanne.chance@rl.doe.gov	A3-04	DOE	
Charboneau, Briant L	briant.charboneau@rl.doe.gov	A6-33	DOE	
Clark, Clifford E	cliff.clark@rl.doe.gov	A5-15	DOE	
Dagan, Ellen	ellen.dagan@rl.doe.gov	A3-04	DOE	. 1
French, Mark	mark.french@rl.doe.gov	A3-04	DOE	Monda
Guercia, Rudolph F	rudolph.guercia@rl.doe.gov	A3-04	DOE	
Hanson, James P	James_P_Hanson@rl.gov	A5-11	DOE	Gaves P. Howon
Morse, John G	John_G_Morse@rl.gov	A5-11	DOE	7
Neath, John P	john.neath@rl.doe.gov	A3-04	DOE	APRIL
Post, Thomas	thomas.post@rl.doe.gov	A3-04	DOE (
Sands, John P	john.sands@rl.doe.gov	A3-04	DOE	
inton, Gregory L	gregory.sinton@rl.doe.gov	A6-38	DOE	
Smith, Chris	douglas.smith@rl.doe.gov	A3-04	DOE	
Thompson, Mike	kenneth.thompson@rl.doe.gov	A6-38	DOE	WM
Voogd, Margo J	margo.voogd@rl.doe.gov	A6-38	DOE	
Weil, Stephen	Stephen_R_Weil@rl.gov	A5-15	DOE	
Zeisloft, Jamie	jamie.zeisloft@rl.doe.gov	A3-04	DOE	
Bond, Fredrick	FBON461@ECY.WA.GOV	H0-57	ECO	
Boyd, Alicia	ABOY461@ECY.WA.GOV	H0-57	ECO	
Goswami, Dib	DGOS461@ECY.WA.GOV	H0-57	ECO	
Huckaby, Alisa D	AHUC461@ECY.WA.GOV	H0-57	ECO	
Jackson-Maine, Zelma	ZJAC461@ECY.WA.GOV	H0-57	ECO	
Jones, Mandy	MJON461@ECY.WA.GOV	H0-57	ECO	
Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO	Mina M Denard
Rochette, Elizabeth	BROC461@ECY.WA.GOV	H0-57	ECO	
Seiple, Jacqueline	JASH461@ECY.WA.GOV	H0-57	ECO	
Smith-Jackson, Noe'l	NSMI461@ECY.WA.GOV	H0-57	ECO	
Varljen, Robin	RVAR461@ECY.WA.GOV	H0-57	ECO	JUG ned
Vhalen, Cheryl	CWHA461@ECY.WA.GOV	H0-57	ECO	
Jim Hansen	James . Hansen Orlabe. 500		DOE	

STATE OF THE STATE	<u> </u>		F	The second state of the se
Buelow, Laura	Buelow.laura.epa.gov	B1-46	EPA	MIS
Gadbois, Larry E	Gadbois.larry@epa.gov	B1-46	EPA	Let .
erhart, Rebecca		B1-46	EPA	
Guzzetti, Christopher	Guzzetti.christopher@epa.gov	B1-46	EPA	Ole 14
Lobos, Rod	Lobs.rod@epa.gov	B1-46	EPA	
Adams, Margie R	M_R_Margie_Adams@rl.gov	R3-60	СН	
Alexander, Deb	Debra_J_Deb_Alexander@rl.gov	E6-35	СН	Hallandu
Barrett, Bill F	William_F_Barrett@rl.gov	E6-44	СН	
Biebesheimer, Fred	Frederick_H_Biebesheimer@rl.g	R3-60	CH ,	At 1
Black, Dale	Dale_G_Black@rl.gov	E6-35	СН	
Borghese, Jane V	Jane_V_Borghese@rl.gov	E6-35	СН	10001
Bowles, Nathan A.	Nathan_Bowles@rl.gov	R3-60	СН	Mala S. S.
Day, Roberta E	Roberta_E_Day@rl.gov	E6-35	СН	7 47 - 0
Dooley, David	David_E_Dooley@rl.gov	R3-60	СН	
Ford, Bruce H	Bruce_H_Ford@rl.gov	H8-43	СН	
Hartman, Mary J	Mary_J_Hartman@rl.gov	B6-06	СН	Mary Fitze Aman
Hickey, Michael J	Michael_Hickey@rl.gov	E6-44	СН	10-11-11-11-11-11-11-11-11-11-11-11-11-1
Kemner, Mark L	Mark_L_Kemner@rl.gov	R3-60	СН	May Blan
ee, Art K.	Art_K_Lee@rl.gov	R3-60	СН	WHK
r iippo, Rob	Robert_E_Piippo@rl.gov	H8-12	СН	
Petersen, Scott	Scott_W_Petersen@rl.gov	E6-35	СН	
Rossi, Amadeo J	Amadeo_J_Rossi@rl.gov	R3-60	СН	
Smoot, John L	John_L_Smoot@rl.gov	B6-06	СН	The San
Toews, Michelle R	Michelle_R_Toews@rl.gov	R3-60	СН	0
Triner, Glen C	Glen_C_Triner@rl.gov	E6-44	СН	
Weekes, Dave C	David_C_Weekes@rl.gov	R3-50	СН	
Winterhalder, John A	John_A_Winterhalder@rl.gov	E6-35	СН	
Williams, Janice	Janice_D_Williams@rl.gov	E6-35	СН	A
Fruchter, Jonathan S	john.fruchter@pnl.gov	K6-96	PNNL	A systely
Peterson, Robert E	robert.peterson@pnl.gov	K6-75	PNNL	Jelles
Cimon, Shelley	scimon@oregontrail.net		Oregon	
Danielson, Al	Al.danielson@doh.wa.gov		WDOH '	Rale
Utley, Randy	Randell.Utley@doh.wa.gov		WDOH	RH
Lilligren, Sandra	sandral@nezperce.org		TRIBES	
Vanni, Jean	JVYNERWIN & hother	11 ene	TRIBES	Q A Jenn
luskie, James	James_A_Eluskie Orligov	IR.	CH	gomes O. Clushi
		-		

The Control of the Co	The second of th			
Bignell, Dale	Dale.Bignell@wch-rcc.com	H4-22	WCH	
Buckmaster, Mark A	mark.buckmaster@wch-rcc.com	X9-08	WCH	
arlson, Richard A	richard.carlson@wch-rcc.com	X4-08	WCH	
Capron, Jason	jmcapron@wch-rcc.com	H4-23	WCH	
Cearlock, Christopher S	cscearlo@wch-rcc.com	H4-22	WCH	
Clark, Steven W	steven.clark@wch-rcc.com	H4-23	WCH	
Darby, John W	john.darby@wch-rcc.com	L6-06	WCH	
Fancher, Jonathan D (Jon)	jon.fancher@wch-rcc.com	L6-06	WCH	01/0
Faulk, Darrin E	defaulk@wch-rcc.com	L6-06	WCH	Shaulk
Fletcher, Jill E	jfletcher@wch-rcc.com	H4-22	WCH	
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH	Labadley
Hedel, Charles W	charles.hedel@wch-rcc.com	H4-22	WCH	
Hulstrom, Larry C	larry.hulstrom@wch-rcc.com	H4-22	WCH	
Jacques, Duane	idjacque@wch-rcc.com	H4-22	WCH	
Johnson, Wayne	Wayne.johnson@wch-rcc.com	H4-22	WCH	
Landon, Roger J	rjlandon@wch-rcc.com	H4-21	WCH	
Lawrence, Barry L	bllawren@wch-rcc.com	T2-03	WCH	·
Lerch, Jeffrey A	jeffrey.lerch@wch-rcc.com	H4-22	WCH	
Long, Heather	halong@wch-rcc.com	H4-10	WCH	Modellor Rong
ttle, Nelson C	nclittle@wch-rcc.com	L6-06	WCH	
McCurley, Clay D	cdmccurl@wch-rcc.com	X5-50	WCH	Claritie Centry
Myer, Robin S	rsmyers@wch-rcc.com	L6-06	WCH	4 3
Obenauer, Dale F	dale.obenauer@wch-rcc.com	X2-05	WCH	
Parnell, Scott E	scott.parnell@wch-rcc.com	N3-21	WCH	
Proctor, Megan	Megan.Proctor@wch-rcc.com	H4-22	WCH	
Saueressig, Daniel G	Daniel.Saueressig@wch-rcc.com	X2-07	WCH	0
Strand, Chris	cpstrand@wch-rcc.com	L1-07	WCH	
Strom, Dean N	dean.strom@wch-rcc.com	X3-40	WCH	CONNO
Yasek, Donna	Donna.yasek@wch-rcc.com	L1-07	WCH	G -71-0
the state of the s				47.4
				·

Attachment B

Long, Heather A

From: Hadley, Karl A

Sent: Thursday, November 04, 2010 12:35 PM

To: Long, Heather A

Subject: FW: Acting Project Manager for Ecology

fyi

From: Menard, Nina (ECY) [mailto:nmen461@ECY.WA.GOV]

Sent: Thursday, November 04, 2010 11:38 AM **To:** French, Mark S; Charboneau, Briant L

Cc: Hadley, Karl A; Neath, John P; Chance, Joanne C; Buelow.Laura@epamail.epa.gov;

Guzzetti.Christopher@epamail.epa.gov; Gadbois.Larry@epamail.epa.gov

Subject: Acting Project Manager for Ecology

In accordance with the Hanford Federal Facility Agreement and Consent Order, Alicia Boyd with the Department of Ecology will the acting Environmental Restoration Project Manager for 11/4 through 11/8/2010.

Nina M. Menard Project Manager Environmental Restoration WA State Dept. of Ecology (509) 372-7941 (509) 420-6839

Attachment C

100/300 Area UMM Action List October 14, 2010

@1991/(@)/ Gloscod(X)		Go.	Actionee	Project	Action Description	Saus
0	100-177	RL	J. Neath	100-D and 100-H	Based on the July 2009 100/300 Area Unit Manager Meeting, Agreement 1, DOE-RL will include notation flags in WIDS to identify which waste sites exceed WAC 173-340 (2007) cleanup levels where so evaluated by Ecology.	Open: 4/8/10; Action:
0	100-178	RL	J. Hanson	100-D, 100-H, 100-K, and 100-N	RL shall evaluate providing Ecology with the annual briefing on the 100-Area's pump and treat systems.	Open: 4/8/10; Action:
0	100-179	RL.	J. Neath	All	DOE will develop in coordination with EPA and Ecology an agreed protocol for interim site closure for waste sites determined to be co-located with orchard affected land.	Open: 8/12/10; Action:

Attachment D

100/300 Area Unit Manager Meeting October 14, 2010 Washington Closure Hanford Building 2620 Fermi Avenue, Richland, WA 99354 Room C209; 1:30-4:30 p.m.

1:30 - 1:45 p.m.

Administrative:

- o Approval and signing of previous meeting minutes (September 2010)
- Update to Action Items List
- Next UMM (11/4/2010, Room C209)

1:45 - 4:00 p.m.

Open Session: Project Area Updates - Groundwater, Field Remediation, D4/ISS:

Note: Each session is estimated at 5 to 15 minutes.

- 100-F & 100-IU-2/6 Areas (Mike Thompson/Jamie Zeisloft)
- o 100-D & 100-H Areas (Jim Hanson/Tom Post/Joanne Chance)
- o 100-N Area (Joanne Chance, Rudy Guercia, Mike Thompson)
- o 100-K Area (Jim Hanson, Jamie Zeisloft, Ellen Dagon, Steve Balone)
- o 100-B/C Area (Greg Sinton, Tom Post)
- o 300 Area 618-10/11 exclusively (Chris Smith)
- 300 Area (Mike Thompson/Chris Smith/Rudy Guercia)
- o Regulatory Closeout Documents Overall Schedule (John Neath, Mike Thompson)
- Mission Completion Project (John Sands)

4:00 - 4:15 p.m.

Special Topics/Other

o 5-Year Record of Decision Action Item Update (Jim Hanson)

4:15 - 4:30 p.m.

<u>Adjourn</u>

Attachment E

100/300 Area Executive Session
Tri-Parties Only
October 14, 2010
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209; 1:00-1:30 p.m.

1:00 - 1:30 p.m.

Executive Session (Tri-Parties Only):

O Lead arsenate levels in the 100 Area soils that are associated with the application of pesticides in the orchards

1:00 - 1:30 p.m.

Administrative:

o Next Executive Session (11/4/2010, Room C209)

Attachment 1

HANFORD CLEANUP ACTIONS BELOW THE ORDINARY HIGH WATER MARK October 14, 2010

The shoreline of the Columbia River is a valued ecological resource within the Hanford Site. Various Hanford CERCLA Interim Action Records of Decision (IARODs) include cleanup of structures and waste sites that may physically extend below the ordinary high water mark (OHWM) of the Columbia River. The IARODs establish the requirements to reduce contaminants in soils and contaminants in the groundwater to meet remedial action objectives for protection of the Columbia River. The scope of the selected response actions cover the entire structures and waste sites involved. When the work involves taking action below the OHWM, however, the need to consider the potential impact of the remedy becomes more significant. A site-by-site consideration is necessary to determine whether previous evaluations in the CERCLA documents adequately addressed the unique impacts of working below the OHWM. In considering the scope of work previously evaluated and presented to the public for comment, several factors shall be reviewed, including: adequacy of cleanup levels, estimated cost, potential ecological impacts and mitigation measures, and compliance with ARARs.

Since the existing cleanup actions authorized by the IARODs are based primarily on considerations associated with cleanup of upland sites and structures, a site-by-site evaluation is used for locations below the OHWM to determine if the existing basis for decision making in the IARODs is adequate to allow work below the OHWM and determine the limitations of that work (minimal impact sites). If a re-evaluation of the cleanup action determines that the existing basis for decision making in the IARODs is not adequate (large impact sites), then additional administrative action is required potentially including additional public input through a future ROD process.

For example a site-specific evaluation of the 100-F-59 waste site (where an extensive debris field was located below the OHWM) was conducted during 2008. Implementation of removal was judged to involve significant activities below the OHWM requiring development of sediment cleanup standards not considered in the current IAROD. A separate waste site was identified which will be addressed in the future RI/FS, Proposed Plan, and ROD for the 100-FR-1 Operable Unit. In contrast, the 100-D-66 waste site includes a small portion of the physical spillway below the OHWM. A site-specific evaluation suggests that the removal of concrete can be implemented with minimal impact to the Columbia River shoreline/riverbed and protectiveness can be established without establishing sediment cleanup standards.

DOE-RL plans to utilize this approach of conducting site-by-site evaluations of remedial action below the OHWM and seek lead regulatory agency concurrence for such actions until final RODs are in place.

Attachment 2

100-FR-3 Operable Unit—Nathan Bowles / Mary Hartman

(M-015-64-T01, 11/30/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-FR-1, 100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units for groundwater and soil.) Schedule Status - On schedule to meet TPA milestone. Field investigations are underway.

The third round of RI/FS spatial and temporal groundwater well-sampling activities for IU2/IU6 is scheduled for October. The third round for 100-F was initiated with 12 of the 19 wells sampled.

New wells C7790 (199-F5-52) and C7792 (199-F5-54) are complete and sampling pumps were installed in late September following well development and slug testing. After they are declared "sample ready," they will be scheduled for quarterly sampling.

Most of the data have been received for groundwater characterization samples from well 199-F5-52: no detectable Cr(VI), Sr-90, TCE; nitrate 28 to 34 mg/L; tritium up to 240 pCi/L. These results are consistent with the previous interpretation of groundwater contamination, and delimit the Cr and Sr-90 plumes on their northwest side.

Only Cr(VI) data are available for well 199-F5-54 to date. All non-detects, which is consistent with previous plume interpretations.

Well C7791 (199-F5-53) was drilled to 28 ft depth by the end of September. No progress since then. Expected water table is at ~37 ft and the well will be drilled and screened in the RUM (expected depth ~110 ft, depending on water production in the RUM).

100-HR-3 Groundwater OU - Fred Biebesheimer / John Smoot

(M-15-115, 08/30/2010, DOE will submit to Ecology a Treatability Test Plan for hexavalent chromium bioremediation of groundwater at 100-D).

Schedule Status - Completed. Document delivered on August 26, 2010.

(M-016-111B, 12/31/2010, Expand current pump-and-treat system at 100-HR-3 operable unit utilizing ex situ treatment, in situ treatment or a combination of both to a total 500 gpm capacity or as specified in the work plan).

Schedule Status - On schedule to meet TPA milestone. The new DX pump-and-treat system will provide a capacity of 600 gpm to augment the existing HR3 operable unit treatment capacity of 350 gpm, and will be operational in the fourth quarter of this calendar year. Acceptance testing is underway at the DX facility.

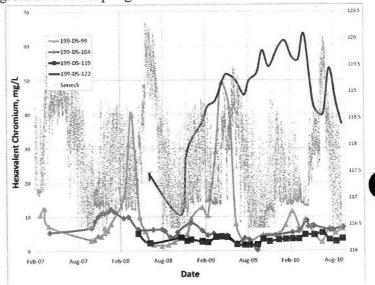
- (M-15-70-T01, 07/30/2011, Submit feasibility study report and proposed plan for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 operable units for groundwater and soil). Schedule Status On schedule to meet TPA milestone. Field investigations were initiated following approval of the Rev. 0 RI/FS work plan documents. Drilling and sampling delayed to resolve safety issues.
 - HR-3 Treatment System
 - For the period September 1 through 30, 2010:
 - The system is pumping with the two RUM wells.
 - Total average flow through the system was 187 gpm.
 Average influent hexavalent chromium concentration for H Area was 112 ug/L
 Average influent hexavalent chromium concentration for D Area was 38 ug/L

- DR-5 Treatment System
 - For the period September 1 through 30, 2010:
 - The DR-5 is running with the hot spot well
 - Total average flow through the system was 30 gpm
 - The average influent hexavalent chromium concentration was 1743 ug/L.
- ISRM Pond Sealing.
 - Waiting for ISRM pond liquids to finish evaporation.
 - CHPRC is evaluating decommissioning path forward, upon completion of the evaluation, a meeting will be held to present recommendations.
- DX construction is in the acceptance testing phase. No contaminated groundwater has been introduced in the system at this point. All discharges related to testing of the DX system have been with clean raw water.
- Proposed treatment capacity at the 100-HX facility has been increased from 400 gpm to 800 gpm (current capacity is 300 gpm). The formal HX design has reached 90%. Construction is underway on road maintenance, HDPE pipe runs, and road crossings. Building construction is underway. The process building walls are being completed.
- Deep Chromium Investigation
 - The Aquifer Test on three existing RUM wells was started August 18 to address the CERCLA 5-year Review Action Item 12-1. A report is in publication.
- RD/RA Work Plan and IAMP. Both documents are being revised to make them stand-alone for 100-HR-3 and bring them up to date (i.e. include DX and HX expansions). The RD/RA Work Plan and IAMP have comments back from DOE and are being revised.
- EM-22 Technology Projects
 - Investigation for mending ISRM Barrier: Laboratory studies into alternative ZVI amendments and dispersants were completed, and the results are being documented.
 - The South Plume Investigation has been released.
 - The North Plume Investigation report has been released.
- RI/FS Activities

All three spatial and temporal uncertainty groundwater sampling events have been conducted. Data

are still being received from the laboratories.

- New aquifer tube installation was completed in the D and H Areas and two sampling rounds are complete.
- Drilling of RI Wells started; no samples have been collected yet due to a stop work on sampling.
- One borehole has been completed.
- May monitoring results from the south plume "hot-spot" are presented on the above. Well D5-122 concentrations have rebounded after the first significant



drop in almost 2 years. This well is up gradient of the new 199-D5-104 "hot-spot" extraction well that is now pumping to the DR-5 extraction system.

100-NR-2 Groundwater OU - Nathan Bowles / Deb Alexander

- (M-015-61, 12/31/2009, Submit RI/FS Work Plan for the 100-NR-1 and 100-NR-2 Operable Units.) Schedule Status- TPA milestone met by DOE/RL submittal of Draft A document to Ecology on December 22, 2009. Ecology comments on the Draft B version of the document were received on June 21, 2010, and responses are being resolved and incorporated into a Rev. 0 document. Until the work plan is finalized and to expedite the well drilling work, a separate RI/FS "mini-SAP" will be proposed for approval to include 8 agreed-upon wells prior to final approval of the work plan addendum (described further below). The primary SAP will be finalized alongside the finalization of the Rev. 0 work plan addendum.
- (M-015-60, six months after the ROD amendment [03/29/2011], If an amendment to the 100-NR-1/2 Record of Decision for Interim Action is issued, DOE shall submit an RD/RA Work Plan.) Schedule Status The 100-NR-1/2 OU Amendment to the Interim Action Record of Decision (IROD) was approved by RL, Ecology, and EPA on September 29, 2010 (described further below). A revision to the NR-1/2 OU Interim Action Remedial Design/Remedial Action Work Plan has been initiated. In order to meet TPA Milestone M-015-60, this draft revision is due to the regulators within six months of the IROD Amendment issue date, resulting in a March 29, 2011 due date.
- (M-015-62-T01, 12/31/2011, Submit a Feasibility Study [FS] Report and Proposed Plan [PP] for the 100-NR-1 and 100-NR-2 Operable Units including groundwater and soil. The FS Report and PP will evaluate the permeable reactive barrier technology and other alternatives and will identify a preferred alternative in accordance with CERCLA requirements.)

 Schedule Status Future schedule status will depend on approval of RI/FS work plan documents.
- 100-NR-1/2 Amendment to the Interim Action Record of Decision (IROD) The 100-NR-1/2 OU IROD Amendment was approved by RL, Ecology, and EPA on September 29, 2010. This IROD amendment allows for the decommissioning of the NR-2 pump-and-treat system and for the installation of an apatite permeable reactive barrier (PRB) along the entire 2,500-foot river shoreline where the Sr-90 plume currently intersects the Columbia River.
- <u>100-N Integrated Sampling and Analysis Plan</u> The Draft A document was submitted to Ecology by RL on June 2, 2010, and is still under Ecology review. Comments have not yet been received.

RI/FS Activities

Planning is underway for collecting upwelling (river-porewater) samples from the bottom of the Columbia River as proposed in the Draft B RI/FS Work Plan Addendum. The Draft A SAP developed for this sampling was reviewed by Ecology. The resulting Ecology comments were reviewed and proposed comment responses and an updated SAP were provided to Ecology for concurrence on September 29, 2010. The sampling subcontract was awarded, but approval of the SAP is required to initiate sampling.

A TPA Change Notice (TPA-CN-370) was approved by RL and Ecology for a second round of spatial-and-temporal groundwater well sampling in September prior to approval of the RI/FS Work Plan Addendum and SAP. The associated sampling was initiated with 18 of the 26 wells

sampled.

Seven RI/FS well drilling locations were walked down with Ecology on September 28, 2010, at the 100-N Area. These include four boreholes/wells (#s 1, 3, 4, and R1) in the area of the 1301-N crib/trench, one borehole/well (#5) in the area of the 1325-N crib, one well (#2) to replace 199-N-18, and one well (#R2) along the 100-N shoreline. An eighth well (#6) is also being proposed, located between 199-K-182 and 199-N-74, SSE of the 130-N-1 (183-N Filter Backwash Pond) WIDS site. Approximate proposed locations shown in figure below.

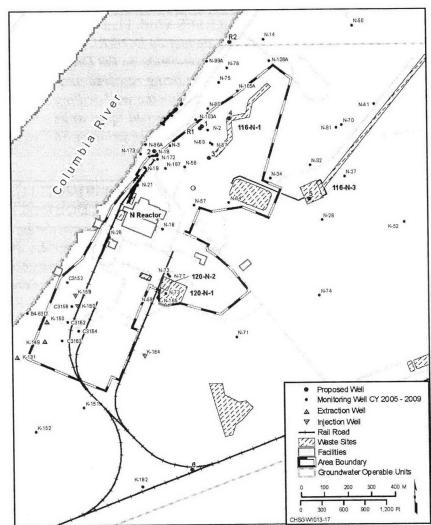
Phytoextraction

 The Draft A TTP for conducting a "hot" demonstration-scale treatability test of phytoextraction at the NR-2

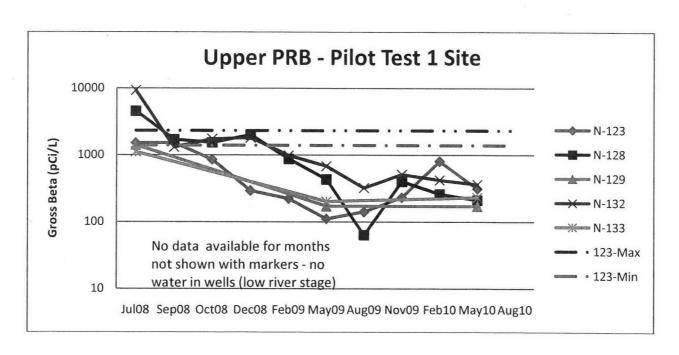
site was transmitted to Ecology for review on September 27, 2010.

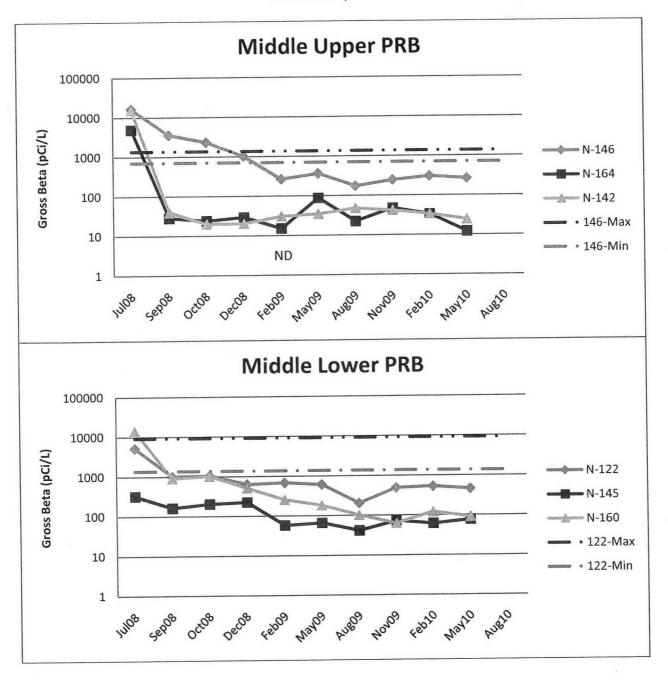
Apatite PRB

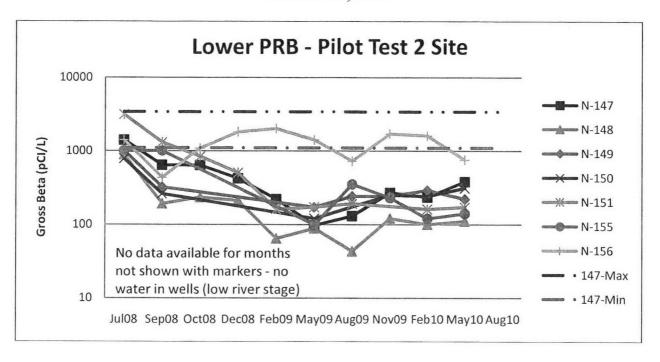
- Rev. 0 100-NR-2 Barrier Expansion Design Optimization Study (DOS) was approved by DOE/RL and Ecology on September 23, 2010. This DOS allows for the initial 600-foot expansion of the apatite PRB in the saturated zone, to an expanded length of 900 feet, prior to full expansion under the recently amended IROD. The associated Field Test Instructions have been approved and released as Rev. 0. Delivery of the first injection skid system was made on September 27, 2010, and the second system was delivered on October 4, 2010. A contractor was selected for the chemical procurement contract and has begun preparing for deliveries. Injections of the Ringold Fm. wells will begin this fall, on the upriver 300-foot portion of the PRB extension. All of the well packers and down-hole equipment have been installed in the first and second round injection wells.
- The Rev. 0 pilot-scale Jet Injection Treatability Test Report was issued and provided to Ecology for reference during review of the next Jet Injection TTP (300 ft), Draft A, described below.



- The Draft A demonstration-scale (300 ft) Jet Injection TTP was transmitted by RL to Ecology on September 16, 2010 for Ecology review.
- Field pilot testing of the NR-2 infiltration gallery was initiated on September 28, 2010. This
 pilot testing is being conducted by PNNL using water with a bromide tracer.
- Sampling of the 171 new well installations is complete. The final nineteen wells were sampled on September 12, 2010.
- Data packages for this sampling effort continue to come in and are being evaluated as they are available. A final package of data will be prepared when all the reports are finalized.. To date, the data from the upriver end of the expansion was reviewed and shared with PNNL, and work began on review of the downriver barrier expansion well data.
- The final performance monitoring required for the original apatite barrier injections (performed in 2006, 2007, and 2008) was performed on August 15 and 16. Results from that sampling event are just beginning to come in, and will be presented to the UMM at a later time. Data from the Performance Monitoring through May 2010 has been plotted is being presented at this month's UMM. The four areas being monitored are shown below, starting at the upriver end of the existing PRB. Most areas are still continuing a downward trend, but there are some areas that appear to be flattening out or on a slight uptrend. These areas may represent places where further apatite injection may be required.







100-KR-4 Groundwater OU - Art Lee

- Monthly Cultural Monitoring: The monthly monitoring of cultural resources for the KR-4 Pumpand-Treat Project was conducted on September 24. No new issues were identified.
- The updated KR4 Pump-and-Treat System cultural resource treatment plan was sent to the Tribes on June 17 with a request for comments by July 23, 2010. Comments have been incorporated and document is in approval process for issuance.
- RI/FS Work Plan, Addendum 2 (K Area Operable Units):
 - The K DU data from the first round of risk assessment sampling has been delivered, reviewed, and loaded into HEIS. The second round of sampling has been completed and data loaded into HEIS. The third round of sampling for high river stage has been completed and data loaded into HEIS.
 - Drilling to total depth completed on 100-KR-4 RI wells C7683, C7687, C7691, C7685, C7690, and C76789. Well design being prepared for C7690 based on preliminary analytical and field sample results. Well development and slug testing at well C7683 have been completed. Well construction and development has been completed for wells C7687, C7691, C7685, and C7690. Drilling is continuing at wells C7692 and C7693. Site preparation activities are underway to set up for drilling the R4 RUM well at the KW head house area.
 - Drilling of RI borehole C7831 and C7832 have been completed. Attempts to collect pumped
 water sample unsuccessful at the two boreholes. The boreholes are planned to be completed as
 temporary wells with the lower portion below the water table screened to collect a water sample.
 - Preliminary groundwater sample results from well C7683 indicate hexavlent chromium contamination in groundwater range from 11 ppb to 30 ppb in the bottom 10 feet of the well (187 197 ft bgs).
 - Preliminary groundwater sample results from well C7691 indicate 35 ppb hexavalent chromium contamination in groundwater at sample collected at the 83 ft bgs interval. Subsequent groundwater samples have been less than detectable.

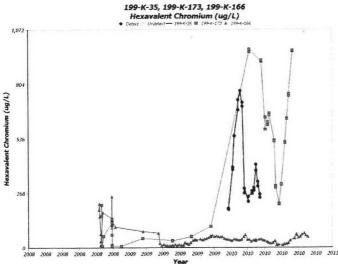
- Preliminary groundwater sample results from well C7692 indicate 11.9-70.8 ppb hexavalent chromium contamination in groundwater at sample collected at 60 to 80 ft bgs. Subsequent groundwater samples have been less than 10 ppb down to 104.7 ft bgs. Expected total depth is 184 ft bgs.
- August sampling completed on new aquifer tubes installed as part of the KR-4 remedial investigation. Paperwork has been prepared for sampling in October for low river stage.
- Preparation of the RI/FS Report that will lead to a final record of decision is in progress.
- Interim Action Monitoring Plan: The decisional draft of the plan, which summarizes existing KR-4 Operable Unit interim action monitoring requirements into one updated document. Draft is being updated to incorporate comments received.
- Resin Testing with KX Groundwater:
 - Issued documents SGW-46221, 100 Area Groundwater Chromium Resin Management Strategy for Ion Exchange Systems, and SGW-46687, K Area Resin Alternatives Analysis Report, documenting results of resin testing and recommending use of SIR-700 single use resins at the 100 K Area pump and treat systems.
 - A process test at the KW pump and treat facility is being prepared to perform full scale test to establish operating parameters using SIR-700 resin. Resin testing using KX groundwater indicated the ion exchange system capacity using SIR-700 is >80,000 bed volumes (BVs) at an influent pH of 5. The estimated capacity at an influent pH of 6.5 is 34,000 BVs for the K Area pump and treat systems. The process test will determine lowest operating pH at the KW pump and treat system using SIR-700 resin without extensive facility modifications.
- KR-4 OU Pump-and-Treat Systems Expansions/Modifications:
 - Construction activities associated with Phase 2 realignment is complete. Working on closing out remaining punch list items and OTP for KX.
 - Phase 3 detailed design for KW, KR-4, and KX is complete.
 - Well locations have been staked and Area of Potential Affect notification was sent on March 25, 2010. Cultural Resources Review transmitted to SHPO and Tribes on July 27, 2010. SHPO did not concur with determination of no adverse effect. Telephone conference was held on September 8 to address SHPO comments and response transmitted to SHPO on September 30 including additional information requested.
 - Following integration discussions with 100K remediation of the 100-K-63 waste site, the new Phase 3 well for the KW P&T (199-K-196) will be relocated up gradient out of the contamination/excavation area to a location between existing extraction wells 199-K-132 and 199-K-138. 199-K-132 and 199-K-138 are shallow wells and installing a fully penetrating well between the two will help provide capture along this line of extraction wells.
 - Phase 3 procurement has been initiated for long lead items and to begin non-field related construction activities.
 - Field work initiated for the KR-4 PLC and well head modifications upgrade. Power and communications cable is being pulled to the wells. New well racks are being installed in the field. Software logic for new HMI with new PLC is being developed. Installation of new PLC components and wiring in DPC cabinet complete. Preparing to shut down KR-4 transfer building #1 and treatment building for the PLC upgrade.
 - Construction work initiated at KR-4 transfer building #1 for building modifications associated with Phase 3 design. This work is being coordinated with the KR-4 PLC upgrade and well head modification projects.

- Procurement and shop fabrication for new well landing plates and electrical/mechanical racks to older KR-4 wells is in progress.
- Remedial Process Optimization (RPO):
 - Update to the 100-KR-4 RPO Conceptual Design Document is in review and comment. The document calls for taking a three-phased approach to meeting the 2012 and 2020 goals. The K-Area RPO Conceptual Design document was reviewed with RL on May 6 to discussion approach and groundwater modeling results. The document will be revised and updated in the coming months.
 - Implementation (initiation of detailed design) of the first of the three RPO phases is underway as Phase 3 KR4 OU pump-and-treat systems realignment.
 - TPA-CN-359 approved for inclusion of the Phase 3 RPO changes to the KR-4 and KX RDR/RAWP documents, DOE/RL-2006-75 and DOE/RL-2006-52, respectively.
 - RPO Phases 4 and 5 call for implementation of bioremediation actions in KW, KE, and the area around the 116-K-2 Trench, as well as additional well drilling and realignment of the pump-and-treat systems. Planning for implementation of a bio-infiltration treatability test at 100-KW is underway.
 - Preparation of a sampling and analysis plan, to support drilling of KR-4 OU RPO and compliance monitoring wells in FY 2011, is underway.
- 100-KR-4 System for the period of September 1 through September 30:
 - The system operated normally.
 - Total average flow through the system was approximately 203 gpm for September. Flow from various KR-4 extraction wells is being adjusted based on hexavalent chromium concentrations to optimize system performance. Groundwater from extraction wells with <10 ppb hexavalent chromium concentration is reduced or shut off to increase resin performance; these wells included extraction wells 199-K-113, 114, 120, 127, and 162 as weekly samples indicated concentration at the extraction wells were <10 ppb. KR-4 transfer building 2 was shutdown for the PLC upgrade. Extraction wells connected to the transfer building include 199-K-113A, 199-K-114A, 199-K-115A, and 199-K-129.
 - Average influent hexavalent chromium concentration was approximately 23 μg/L for September.
- KX System for the period of September 1 through September 30:
 - The facility operated normally.
 - Hexavalent chromium concentration remains <10 ppb at extraction wells 199-K-149 and 199-K-150 and the extraction wells have been turned off to evaluate rebound. Hexavalent chromium concentration at well 199-K-150 has been below 10ppb since October 2009, and at well 199-K-149 the concentration has been <10 ppb since June. TPA-CN-359 has been approved to convert the two extraction wells to monitoring wells and convert monitoring wells 199-K-152 and 199-K-182, where hexavalent chromium contamination is >60 ppb, to extraction wells connected to the KX pump and treat system.
 - Total average flow through the system was approximately 432 gpm in September.
 - Average influent hexavalent chromium concentration was 42 μ g/L in September.
 - Sand has been observed in groundwater extracted from well 199-K-178. Extraction rate has been reduced from this well to minimize filter plugging. This will impact the planned aquifer test at well 199-K-178. Work package is being prepared to redevelop the well.
- KW System for the period of September 1 through September 30:
 - The KW system operated normally.

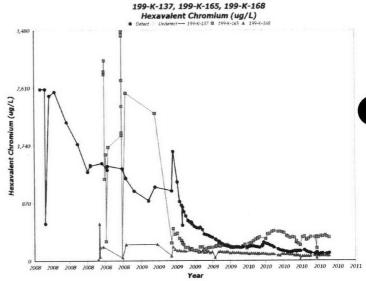
- Total average flow through the system was approximately 199 gpm for September.
- Average influent hexavalent chromium concentration was 147 μg/L for September.
- 10 totes of resin from KW planned to be shipped for regeneration were above the authorization limit for C-14 (based on Sr-90 values) and could not be shipped. The Authorized Limit Application for the resin is currently undergoing revision to add C-14 as a COC and allow for our increased production as the authorization limit for C-14 will increase based on dose modeling calculations. Also, the Waste Management Plan is also undergoing revision to allow for composite sampling of the two totes representing one vessel of similar material. The composite analysis may result in some failed totes meeting the authorization limit.
- Planning has been initiated to convert well 199-K-173 into an extraction well connected to the KW pump and treat system to treat the high hexavalent chromium at this well (~960 ug/L in sample taken August 12).
- September Monitoring Activities:

Routine Monitoring: During September, 86 samples were collected at 18 KR4 OU wells. No aquifer tubes were sampled this month, Low river stage sampling at all wells will occur in October with results due in November and December.

KW extraction wells: Based on operational sampling, average monthly values for all extraction wells were above the 20 μg/L aquatic standard at the through September. Cr6+ levels in the 2 wells closest to the river (K-132 and K-138) remained just above the RAO, at monthly averages of 21 μg/L and 23 μg/L, respectively. Key wells farther inland (K-137, K-165) experienced different trends. Well 199-K-137 averaged 105 μg/L in September while well 199-K-165 averaged 367 μg/L. The extraction well pair of 199-K-168 and 199-K-139 averaged 72 and 35 μg/L, respectively. Well 199-K-139, located within



limitations from local construction activities.

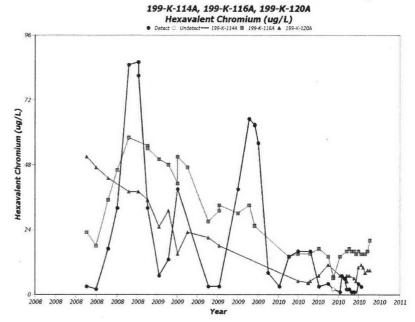


30 ft of 199-K-168 is screened across the upper 25 ft of the 84 ft thick aquifer, while well 199-K-168 is screened across the lower 60 ft. A potential response to increases at 199-K-173, downgradient extraction well 199-K-166 rose from 54 to 70 µg/L in September While averaging 62 µg/L for the month.

KW Monitoring Wells: Hexavalent chromium at monitoring well 199-K-173 rose sharply, spiking at 967 µg/L in August 2010 sampling after declining to 215 µg/L in late June. No additional samples have been taken due to access

KR4 Extraction Wells: Based on monthly operational sampling, Cr6+ levels for wells at the NE end of the 116-K-2 trench and along the central section were generally below 20 μ g/L at all wells (K-113A, K-114A, K-116A, K-127, and K-129) in September results. The highest concentration detected at these wells was 22 μ g/L at 199-K-129. Wells at the SW end of the K-2 trench ranged

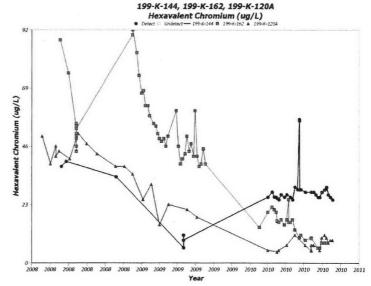
between 8 to 11 ug/L (at 199-K-120A and 199-K-162) to 30 and 63 μg/L, respectively (at wells 199-K-144 and 199-K-145). Well 199-K-145 (59 μg/L, avg.) is downgradient of monitoring well 199-K-18 (175 μg/L, in August) and 199-K-115A (3 µg/L) is downgradient of 199-K-22 (117 µg/L in June). For September, extraction rates at the wells along the length and at NE end of the trench were 90-100 gpm, as wells 199-K-113A and 119-K-127 were temporarily shut down during high river stage. For the four wells at the SW end of the 116-K-2 trench, pumping rates were about 130 to 140 gpm.



KR-4 Extraction Wells

KR4 Monitoring Wells: No new data to report in September. Hexavalent chromium

concentrations at monitoring well 199-K-18 dropped to 173 µg/L for filtered and unfiltered August (quarterly) samples. This is a break in the well's trend of high chromium levels in groundwater near the head end of the 116-K-2 trench. Additional data is not in to replace the June data for well 199-K-22 at 116 μg/L. August hexavalent chromium concentrations at well 199-K-20, located downgradient of the center of the 116-K-2 trench were above laboratory detection values at 4.4 µg/L. Well 199-K-21 reached 21.3 µg/L with a filtered sample in July, 2010 and averaged 19.9 µg/L for that sampling event.



KR-4 SW Extraction Wells 116-K-2 Trench

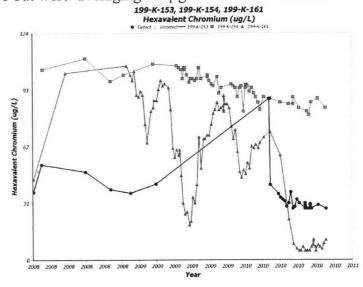
KX Extraction Wells:

Northernmost plume: September operational monitoring results were relatively constant in overall Cr6+ trends. Well 199-K-130 showed a slight decrease to 39 µg/L from August data

whereas well 199-K-131 showed a slight increase from 33 to 36 μ g/L. Values ranged from 43 μ g/L (K-148) to near non-detect at wells 199-K-149 (3.5 μ g/L) and 199-K-150 (2 μ g/L), both of which were shut down and which will be converted to monitoring or injection wells. Data from wells 199-K-150, K-149 and K-131 suggest this end of the plume is being remediated. Well 199-K-147, downgradient of the Calcium Polysulfide test facility continues a stable trend at 35 μ g/L Cr6+.

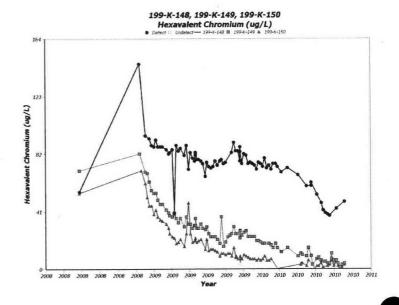
Plume at Northeast End of K-2 Trench: September field results indicated generally long-term decreases in overall Cr6+ levels. For wells downgradient of the 116-K-2 trench, Cr6+ concentrations rose to 22 μ g/L at 199-K-146 but were averaging 7.5 μ g/L at well 199-K-161.

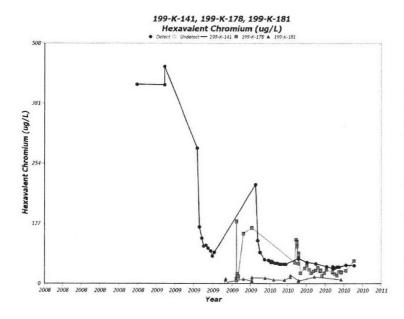
For wells upgradient of the trench, but downgradient of the plume at 199-K-171, average Cr6+ concentrations of 29, 88 and 56 μg/L were detected at respective wells 199-K-153, 199-K-154 and 199-K-163 for August. These wells averaged a combined extraction rate of 180 - 190 gpm. Hexavalent chromium concentrations well 199-K-171 averaged 52 μg/L, but declined to 25 μg/L in early October. This well lies 800 m upgradient of wells 199-K-163 and 199-K-154 and yielded an average pumping rate of 60 gpm.



- KE Reactor Plume: Cr6+ at well K-141 increased to 39 μ g/L in September. At K-178, chrome has declined to an average of 21 μ g/L. The two wells extracted at a combined rate of 70-80 gpm.
- KE Monitoring Wells: Wells 199-K-29 and K-30 are located within a D4 zone where building 115-KE and 117-KE are being torn down. These wells have not been decommissioned and may be available for sampling at the completion of field work.

KX Extraction Wells, Northernmost plume





KX Extraction and Monitoring Wells, 105-KE Reactor

KX Monitoring Wells: Three monitoring wells, 199-K-151, 199-K-152, and K-182 help define the Cr6+ plume near the N-Reactor fence line. These wells were sampled in September. The Cr6+ trends at well 199-K-151 decreased from 21 μ g/L to 9.0 μ g/L between June and September. Well 199-K-152 decreased to 60 μ g/L in September. Well 199-K-182, upgradient of the two, recorded Cr6+ concentrations of 81 μ g/L.

100-BC-5 Operable Units—Nathan Bowles / Mary Hartman

(M-015-68-T01, 11/30/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-BC-1, 100-

BC-2 and 100-BC-5 Operable Units for groundwater and soil.)

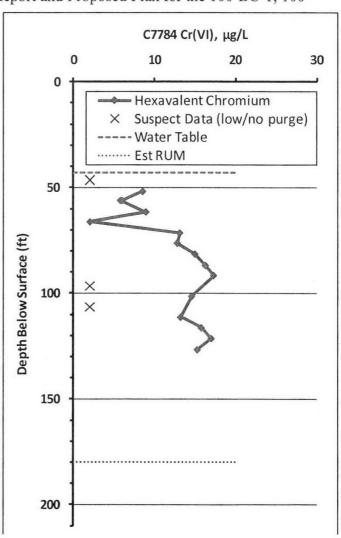
Schedule Status - On Schedule to meet TPA milestone. Field investigations are underway.

The third and final round of RI/FS spatial and temporal groundwater sampling for 100-BC was completed in September.

Slug testing occurred in RI/FS well 4 (C7508; 199-B8-9), near C Reactor building and well 1 (C7786, 199-B4-14), adjacent to deep well 199-B5-6.

RI/FS well 2 (C7784; 199-B2-16)) is being drilled near the water intake structure. The well was at a depth of 133 ft when drilling ceased in late September due to the sampling "stop work." Cr(VI) concentrations have ranged from <2 to 17 ug/L so far.

Final planning and preparations are underway for collecting upwelling (river-porewater) samples from the bottom of the Columbia River along the 100-BC Area as proposed in the RI/FS Work Plan Addendum and SAP. The sampling subcontract was awarded, and sampling is expected to begin in late October.



300-FF-5 Operable Unit—Mark Kemner/Bob Peterson

- 300-FF-5 Operations and Maintenance Plan Activities (DOE/RL-95-73, Rev. 1, 2002)
 - 300 Area Subregion: The most recent results for uranium are for samples collected from wells in August and September. Results are consistent with historical trends and expectations, and continue to show evidence that this year's high water table conditions extended into the zone where mobile uranium still remains at some locations (a threshold water table elevation appears to be approximately 106.5 meters). Concentrations at inland well 399-3-6 also rose in response to the elevated water table; remedial investigation characterization borehole C7661 is near this well and when drilled, will provide data on contamination in the vadose zone. The most recent samples were collected in early September.
 - Special sampling downgradient of the 618-7 Burial Ground remediation site: Samples collected in June and July reveal slow passage of a plume created earlier during remedial actions at the former burial ground.
 - Special sampling near the 618-1 Burial Ground remediation site: Samples collected during the summer high water table conditions showed elevated uranium concentrations, which dropped to lower levels following a return to lower water table conditions.
 - 618-11 Burial Ground Subregion: The most recent results are for samples collected in early September. Tritium values have remained relatively constant at the well closest to the likely area of release in the burial ground, and within the range 800,000 ~ 900,000 pCi/L since 2008. This suggests continued input of some tritium from the vadose zone.
 - 618-10 Burial Ground Subregion: Results for samples collected in August reveal no evidence for impacts to groundwater because of current remedial actions in the burial ground. COPC concentrations are lower than their respective drinking water standards (tributyl phosphate is not detected).

Other Activities:

— Uranium Analyzer Field Test: Plans have been approved to install a field analyzer for continuous uranium monitoring in water samples. Water will be withdrawn from up to four sources, currently planned to be aquifer tubes near the South Process Pond. Uranium will be measured continuously at intervals of several hours. The installation is part of a DOE technology development research grant.

Attachment 3

Field Remediation IU-2/6



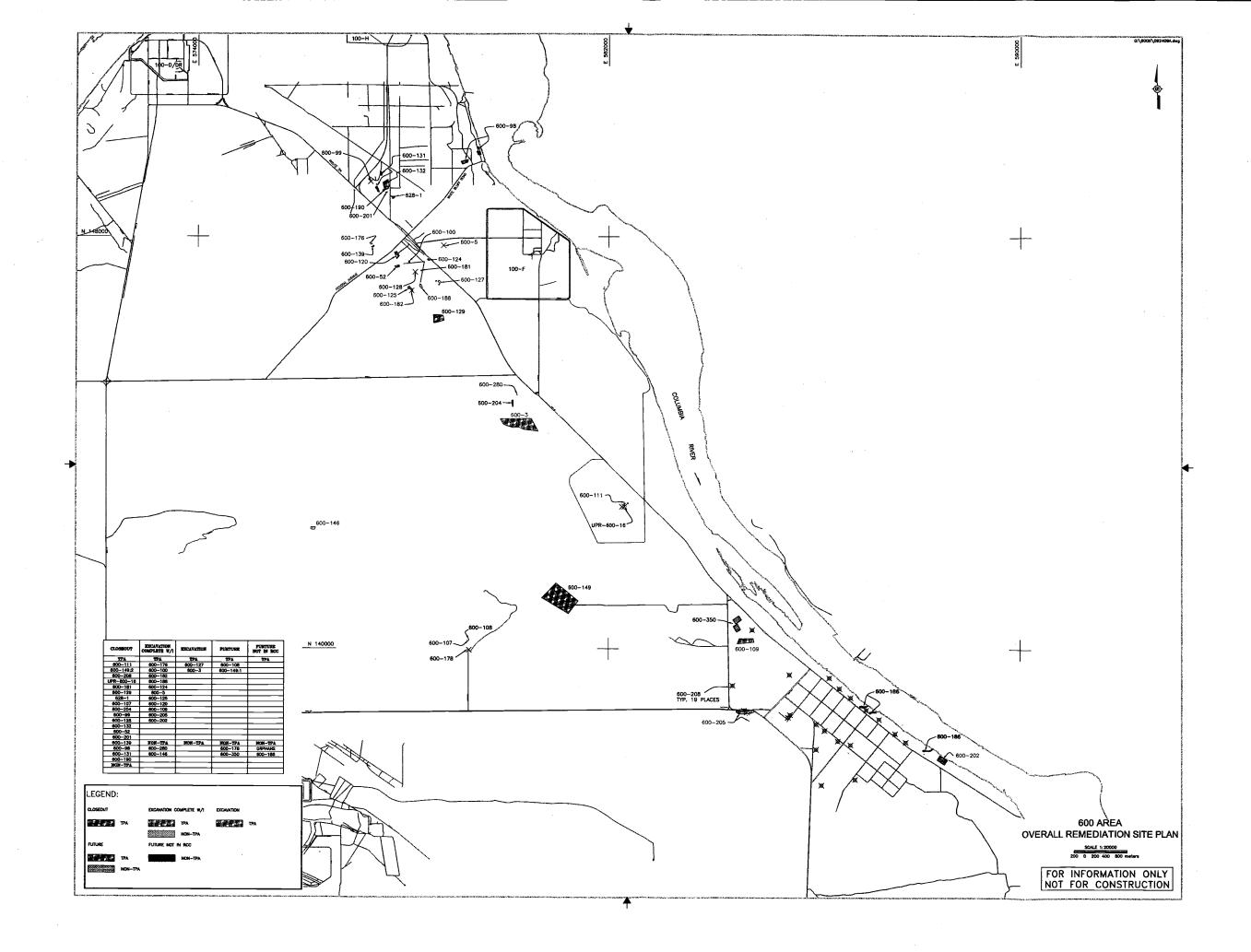
TPA Milestone M-16-56 (02-28-12) Milestone Description: Complete Interim Re

	micacone peaculon		Juplet	e inte	LIM KE	micescene Description: Complete Interim Remedial Actions for 100-IU-2 & 100-IU-6 Waste Sites
Activity	Activity	%	Rem	Early	Early	FVII
QI .	Description	Comp	Dur	Start	Finish	OCT NOV DEC JAN FEB MAR APR MAY IIIN
IU 2 & 6 Excavation						1,28,4 ,11,18,25,2 ,9
R003E3	600-003 Excavation Part 2	85	19 12APR10A		16NOV10	
R178E	600-178 Excavation	0	9 01NOV10*		15NOV10	
R108E	600-108 Excavation	0	35 16NOV10		24JAN11	
IU 2 & 6 Load-out	out					
R003L	600-003 Load-Out	59	24 11AUG10A		29NOV10	
R280L2	600-280 Load-Out	100	0 06OCT10A		06OCT10A	
R108L	600-108 Load-Out (ERDF Cans)	0	35 16NOV10*		24JAN11	
R003LE	600-3 ERDF Can Load-out	0	20 30NOV10		06JAN11	
R178L	600-178 Load-Out (ERDF Cans)	0	2 25JAN11*		26JAN11	
600-108 - 213 J	600-108 - 213 J&K Storage Facility			4		
6108C120	Hire Additional Crew	75	9 13SEP10A		28OCT10	
6108E100	Start Excavation/Removal	0	0 16NOV10			
600-149:1- Sma	600-149:1- Small Arms, Rifle & Pistol Range					
6149M120	Crew Training	100	0 04OCT10A		120CT10A	
6149E100	Boundary Civil Survey & Field Characterization	7	64 05OCT10A		10FFB11	
6149R100	Coordinate and Remove UXO	0	28 14FEB11		04APR11	
6149C100	Prepare Final and Closure Reports	0	40 05APR11		14JUN11	
- Constr	600-186 - Construction Camp Septic System					
6186CR	Cultural Review-Phase II Samples (7 locations)	86	2 10MAR10A		18OCT10	
6186EP	Excavation Permit	86	2 10MAY10A		18OCT10	
6186PHASE2	Collection of Phase II Samples (7 locations)	0	4 19OCT10		25OCT10	
600-202 Cultural	600-202 Cultural Materials Impact					
6202A100	Cultural Materials Discovered	100	0 06OCT10A		06OCT10A	
6202A110	DOE/SHPO Preliminary Assessment	20	1 13OCT10A		14OCT10	
	Resume Verification Sampling	0	8 18OCT10		28OCT10	
6202A130	Cultural Material Sampling	0	4 01NOV10		04NOV10	
				1		

Activity /Actions Supporting Schedule

- Cultural Reviews are important for 600-186
- Approximately 450 ERDF cans will be needed after the T&P campaign is complete at 600-3.

	te Status	2 2	12 3/31/12 F
	Due Date	2/28/2013	3/31/2012
ISSUE / CONCERNS	Milestones	TPA M-16-56	PM - 26



^WCH Document Control

From:

Saueressig, Daniel G

Sent:

Tuesday, September 14, 2010 7:08 AM

To:

^WCH Document Control

Subject:

FW: APPROVAL REQUEST FOR WASTE STAGING AREAS AT 100-F

Attachments: AOC_maps.PDF

Please provide a chron number (and include the attachment), this email documents a regulatory agreement.

Thanks.

Dan Saueressig FR Environmental Project Lead Washington Closure Hanford 521-5326

From: Guzzetti.Christopher@epamail.epa.gov [mailto:Guzzetti.Christopher@epamail.epa.gov]

Sent: Monday, September 13, 2010 9:53 PM

To: Saueressig, Daniel G

Cc: Landon, Roger J; Wilkinson, Stephen G; Post, Thomas C

Subject: Re: APPROVAL REQUEST FOR WASTE STAGING AREAS AT 100-F

Dan -

After review, I am approving the proposed waste staging areas for the 100-F remediation activities. Please use this email to document in a future UMM.

Christopher J. Guzzetti U.S. EPA Region 10 Hanford Project Office Phone: (509) 376-9529 Fax: (509) 376-2396

Email: guzzetti.christopher@epa.gov

From: "Saueressig, Daniel G" <dgsauere@wch-rcc.com>

To: Christopher Guzzetti/R10/USEPA/US@EPA

Cc: "Post, Thomas C" <thomas.post@rl.doe.gov>, "Wilkinson, Stephen G" <sgwilkin@wch-rcc.com>, "Landon, Roger J" <RJLANDON@wch-

rcc.com>

Date: 09/13/2010 10:46 AM

Subject: APPROVAL REQUEST FOR WASTE STAGING AREAS AT 100-F

153183

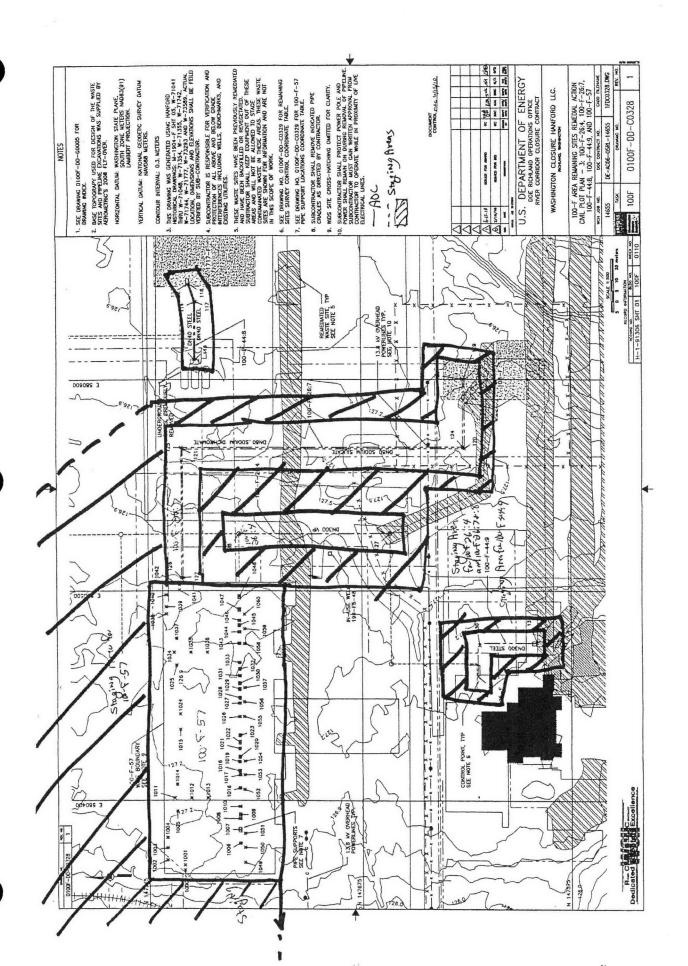
Chris, I'd like to request your approval to set up and manage some waste staging areas at 100-F. The areas are shown in the attached drawings. The areas will be managed in accordance with Section 4.5.2 of the Remaining Sites RDR/RAWP (DOE/RL-96-17. Rev. 6). Although a couple of the staging areas on the maps are identified for more than one waste site, no co-mingling of waste will take place. Waste from different sites will be separated from each other with berms and the actual locations where waste is staged will be documented with GPS.

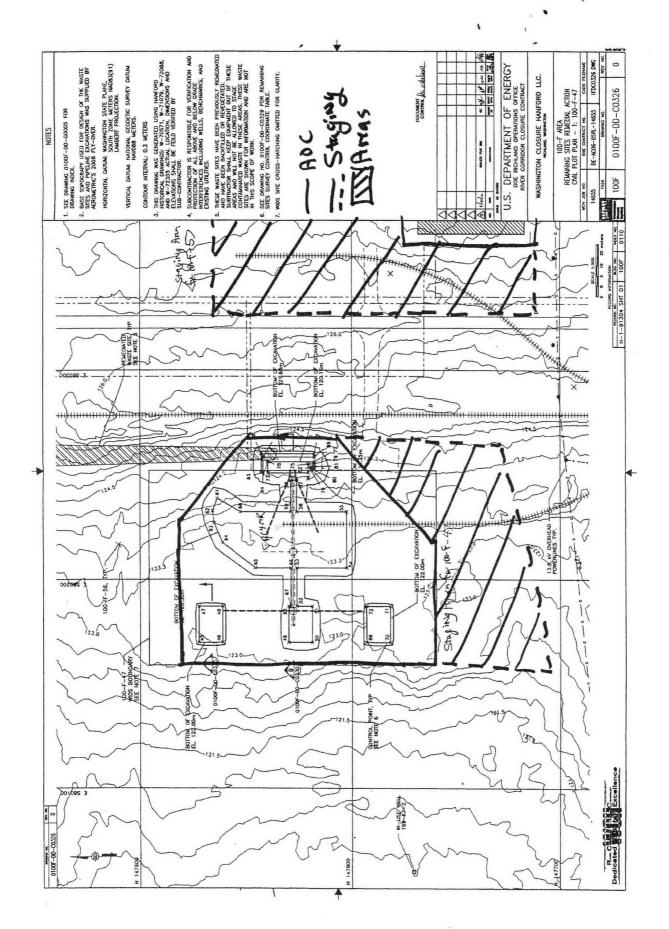
Let me if you approve of the waste staging areas in the attached map.

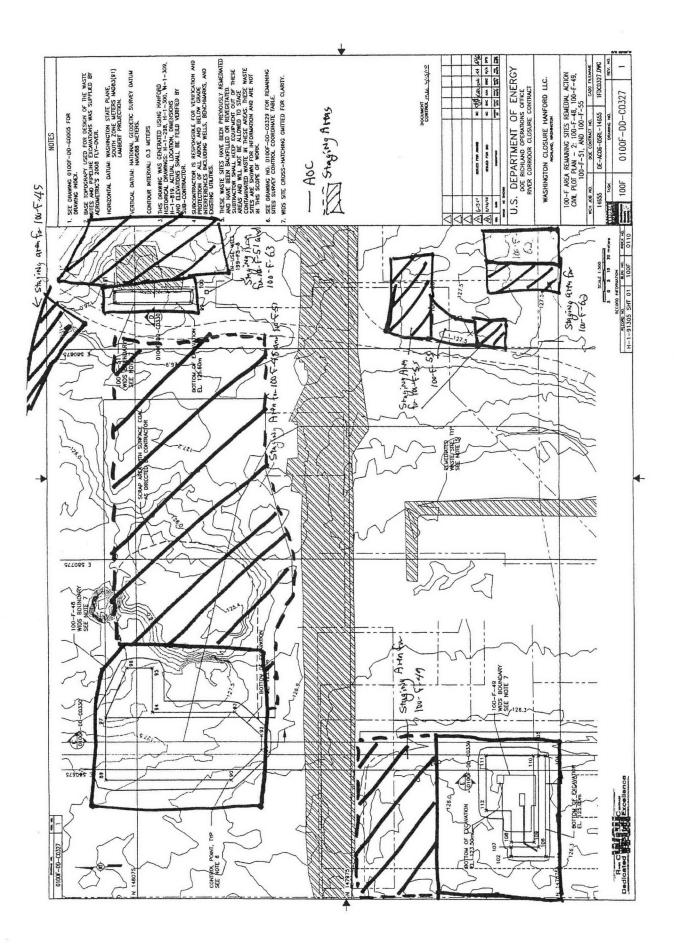
Thanks and give me a call if you have any questions.

Dan 521-5326

<<AOC_maps.PDF>> [attachment "AOC_maps.PDF" deleted by Christopher Guzzetti/R10/USEPA/US]







100 Area D4/ISS Status

October 14, 2010

D4 100H:

183-H West Clearwell: All D4 activities are complete. Backfilling of structure will be performed with east clearwell area backfill.

D4 100N:

105-N Reactor Building: North side demolition is complete, with excavation now partially backfilled. GPERS surveys near the western edge of the excavation identified contamination in the soil under the former tunnels. Additional excavation is being conducted to remove the contamination and another GPERS survey is scheduled for next week. Demolition and excavation on the west side, adjacent to the Fuel Storage Basin (FSB), is currently on hold pending grouting of the C Elevator and draining of a pipe that connects it to the FSB's lift station.

Soil sampling results at intake plenum (near the northeast corner of the SSE) demonstrated that contamination found there does not increase with depth. A report describing the investigation will be prepared and reviewed with Ecology.

109-N Heat Exchanger Building: Structural steel erection on 109-N roof structure and sealing of penetrations in SSE walls is ongoing. Roof should be installed on 109N by December

116-N Air Exhaust Stack (Substructure): Demolition of this structure should start within the next month.

181-N, 181-NE, 1908-N, 1908-NE: The conceptual plan for D4 of the river structures has been completed and presented to the tribes, and regulatory agencies. The tribes participated in a field trip to view the river structures. A request for proposal has been prepared and extended to subcontractors for support activities. Cultural resources review is going. Equipment removal at the 181-N River Pumphouse will continue and equipment removal from the 181-NE HGP River Pumphouse will restarte after two transformers at the facility have been drained of their coolant.

182-N High Lift Pumphouse: Scaffolding erection has resumed and limited asbestos removal is being conducted to support scaffolding completion.

1322-N Facilities: Below grade demolition is complete. Final load out of debris should be completed today. Visual examination, radiological surveying of the excavation, and the 1310-N excavation, is expected during the next month. The excavations will then be turned over for removal of the remaining pipes and characterization.

1909-N Waste Disposal Valve Pit: Excavation is almost complete. Activities are now focusing on tapping several pipes that enter and exit the pit to ensure all water has been drained and collected prior to demolition. D4 of the pit and backfill is expected within the next two weeks.

Limited Backfill of the 118-H-6:4 Subsite

There is a need to perform backfill in a limited portion of the 118-H-6:4 excavation to allow access for an RI characterization boring. Based on the verification data presented in the Draft A CVP for the 118-H-6:4 subsite, Ecology and DOE-RL have agreed that such backfill may proceed as necessary to allow such access. This backfill will preferentially be performed near the southeast corner of the Reactor ISS enclosure, and only to the extent necessary to allow safe access for drilling equipment. Please note that, for final decisions for the 105-H Fuel Storage Basin, data from the borehole, the 118-H-6:4 FSB side slopes waste site, and from the 118-H-6 FSB deep zone will be evaluated in total. At that time, removal of this backfill may be required.

^WCH Document Control

153866

From:

Saueressig, Daniel G

Sent:

Thursday, October 07, 2010 9:06 AM

To:

^WCH Document Control

Subject:

FW: Proposed 132-D-1 Staging Area

Attachments: Proposed 132-D-1 Staging Area.PDF

Please provide a chron number. This email documents a regulatory approval.

Thanks,

Dan Saueressig FR Environmental Project Lead Washington Closure Hanford 521-5326

From: Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]

Sent: Wednesday, September 29, 2010 11:29 AM

To: Laurenz, Julian E; Post, Thomas C

Cc: Martin, David W; Saueressig, Daniel G; Menard, Nina

Subject: RE: Proposed 132-D-1 Staging Area

Julian,

Based on the information provided, Ecology is approving the request for an additional staging pile area for the 132-D-1 waste site, as identified on the drawing provided September 23rd, 2010.

Please ensure that this staging pile is operated in accordance with the Section 4.5.2 in the RDR/RAWP for the 100 Area, DOE/RL-96-17, Rev 6. Additionally, please ensure that all contaminants of concern for 132-D-1 are carried forward into the verification sampling plan for this staging pile location.

Please have this agreement captured in the 100/300 Area UMM minutes along with the updated civil drawing, which clearly identifies the staging pile location.

Let me know if you have any questions.

Thanks,

Mandy

From: Laurenz, Julian E [mailto:jelauren@wch-rcc.com]

Sent: Thu 9/23/2010 4:27 PM

To: Jones, Mandy (ECY); Post, Thomas C Cc: Martin, David W; Saueressig, Daniel G Subject: Proposed 132-D-1 Staging Area

153866

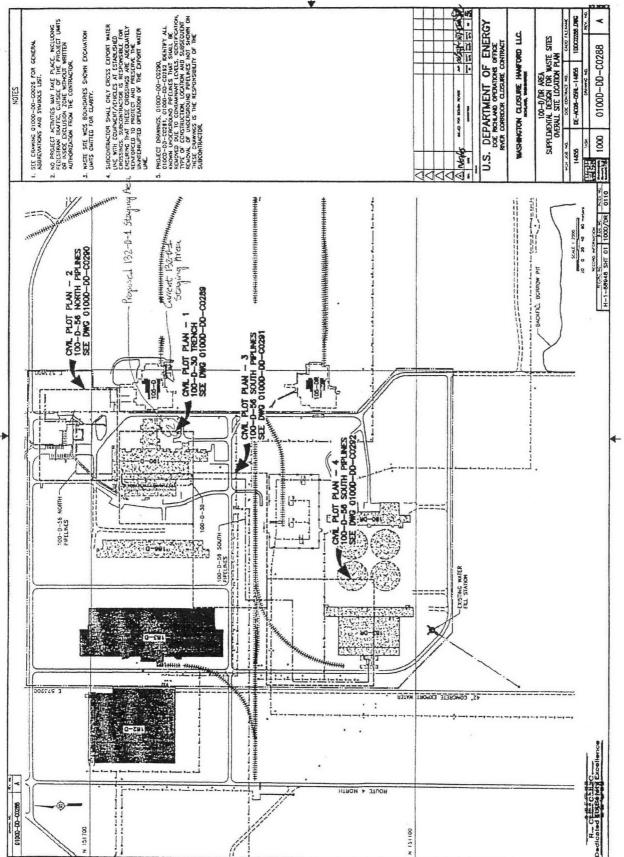
<< Proposed 132-D-1 Staging Area.PDF>> Mandy/Tom,

How is it going? We'll be starting the 132-D-1 remediation early next week. We already anticipate the need for an additional staging area for 132-D-1, since the currently approved staging area intercepts an open excavation and a future well.

The attached drawing shows the location of the current staging area and where we would like to establish a second staging area. The new staging area is not within the footprint of a future remediation.

Please review, and if you concur, I'd like to get approval by Thursday, September 30.

Thanks, Julian



^WCH Document Control

153955

From:

Saueressig, Daniel G

Sent:

Thursday, October 14, 2010 11:25 AM

To:

^WCH Document Control

Subject:

FW: Proposed staging areas and ramps for 132-H-3 and 132-H-1

Attachments: 100-H Proposed Ramps and Stack Remediation - 1_01.png; 100-H Proposed Staging Area

Expansion.PNG

Please provide a chron number (and include the attachments). This email documents a regulatory agreement.

Thanks.

Dan Saueressig FR Environmental Project Lead Washington Closure Hanford 521-5326

From: Neath, John [mailto:John.Neath@rl.doe.gov]

Sent: Thursday, October 14, 2010 7:39 AM

To: Saueressig, Daniel G

Cc: Jones, Mandy; Chance, Joanne C; Menard, Nina; Martin, David W; Gonsalves, Edward

Subject: RE: Proposed staging areas and ramps for 132-H-3 and 132-H-1

DOE agrees with the proposed expansion of the staging areas.

John Neath, River Corridor Closure Project, DOE/RL (509)372-0649

From: Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]

Sent: Wednesday, October 13, 2010 8:25 AM

To: Neath, John

Subject: FW: Proposed staging areas and ramps for 132-H-3 and 132-H-1

John, can you concur with Mandy's email below for Joanne since she's gone until next Monday? We'd like to start using this area soon.

Thanks,

Dan Saueressig FR Environmental Project Lead Washington Closure Hanford 521-5326

From: Jones, Mandy (ECY) [mailto:mjon461@ECY.WA.GOV]

Sent: Wednesday, October 13, 2010 7:30 AM **To:** Gonsalves, Edward; Chance, Joanne C

Cc: Saueressig, Daniel G; Curcio, Joseph P; Martin, David W; Laurenz, Julian E; Menard, Nina

Subject: RE: Proposed staging areas and ramps for 132-H-3 and 132-H-1

Edward,

If DOE is in agreement; based on the information provided, Ecology is approving the request for additional staging pile areas for the 132-H-3 waste site, as identified on the drawing provided October 7th, 2010.

Please ensure that these staging piles are operated in accordance with the Section 4.5.2 in the RDR/RAWP for the 100 Area, DOE/RL-96-17, Rev 6. Additionally, please ensure that all contaminants of concern (COCs) for 132-H-3 are carried forward into the verification sampling plan for these staging pile locations.

It is unclear from your e-mail if you intend to use these staging pile areas for soil from 132-H-1 waste site also. If these staging pile areas are also used to stage soil for 132-H-1, the COCs for 132-H-1 will also need to be carried forward into the verification sampling plan for these staging pile locations.

Please have this agreement captured in the 100/300 Area UMM minutes along with the updated civil drawing, which clearly identifies the staging pile locations.

Additionally, the location and placement of your ramps for 132-H-1 and 132-H-3 are acceptable to Ecology.

Let me know if you have any questions.

Thanks, Mandy

From: Gonsalves, Edward [mailto:egonsalv@wch-rcc.com]

Sent: Thu 10/7/2010 4:52 PM

To: Jones, Mandy (ECY); Chance, Joanne C

Cc: Saueressig, Daniel G; Curcio, Joseph P; Martin, David W; Laurenz, Julian E

Subject: Proposed staging areas and ramps for 132-H-3 and 132-H-1

Mandy and Joanne,

I am taking over the RE position at 100-H. I have talked with John Marthini, the subcontractor's site supervisor, and he has concerns that the ACL volume in the 132-H-3 will be greater than expected. He would like to be able to extend the stockpile staging areas if necessary. The north stockpile is an extension of the stockpile approved last month. Attached is a sketch of the areas. To let you know, we inadvertently staged waste (BCL) in the requested north stockpile shown on the attached sketch. Once the error was identified, we immediately requested the subcontractor to cease stockpiling in this area until we received concurrence from DOE and Ecology.

In addition to the stockpile areas, the subcontractor also needs to build two more ramps. One on the southeast side to facilitate the remediation of the 132-H-3 site. The other is on the north to facilitate the remediation of the 132-H-1, 116-H Reactor Exhaust Stack Burial Site.

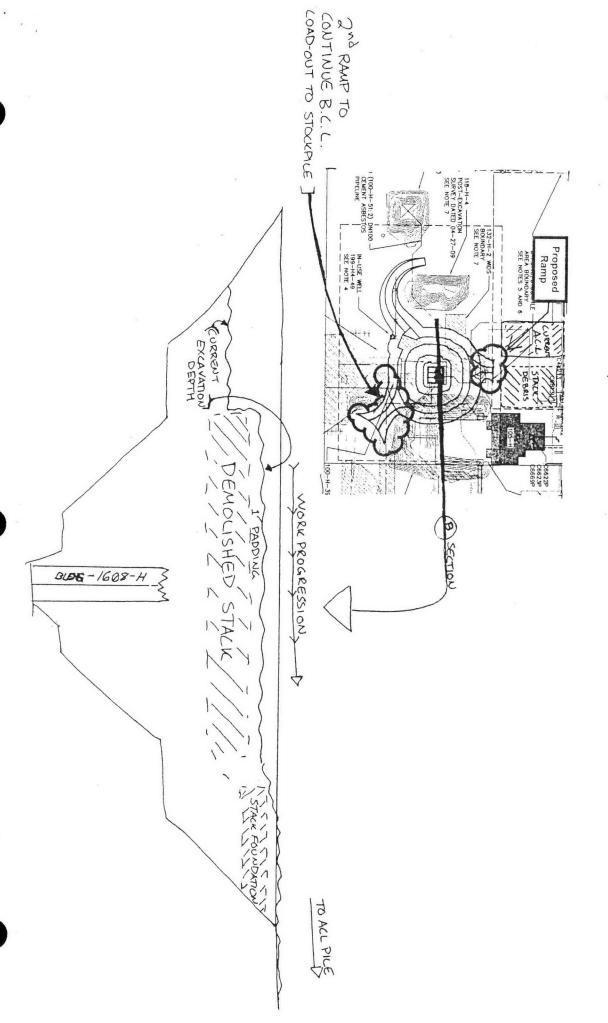
If acceptable, WCH would appreciate your concurrence to develop the additional stockpile areas and ramps. Your prompt attention by October 13 to these matters will be appreciated.

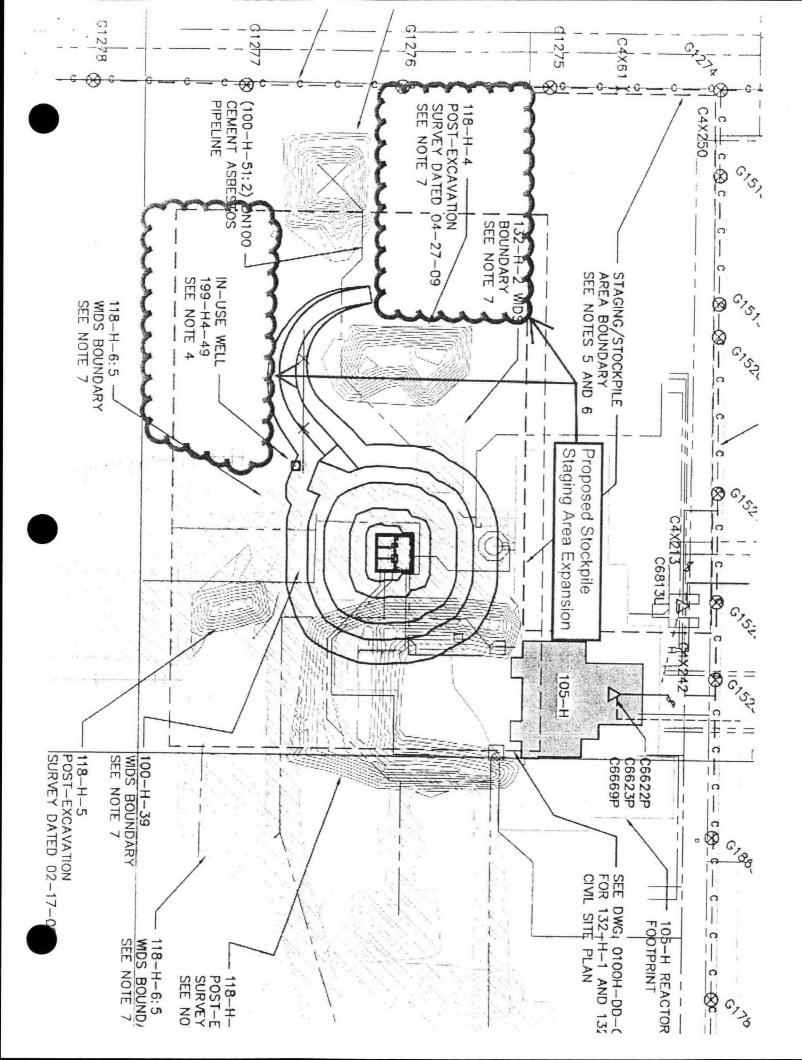
Thanks,

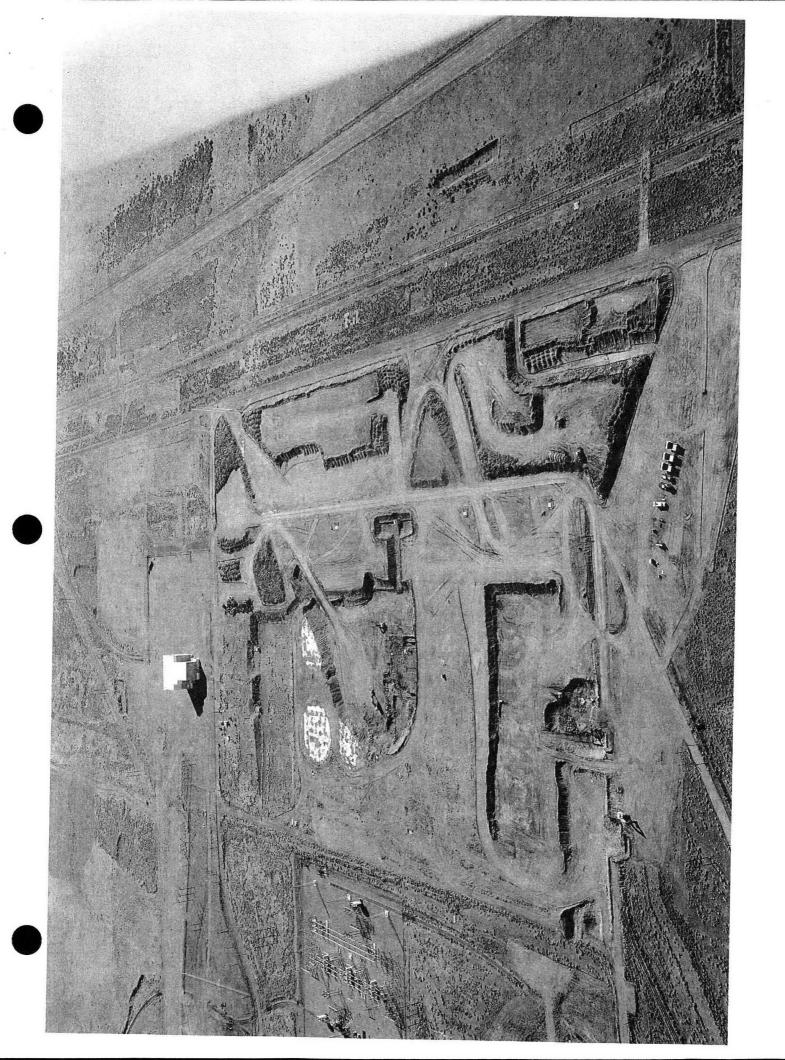
153955

Edward Gonsalves 100-H Resident Engineer 539-2296

<<100-H Proposed Ramps and Stack Remediation - 1_01.png>> <<100-H Proposed Staging Area Expansion.PNG>>









Field Remediation 100-C-7

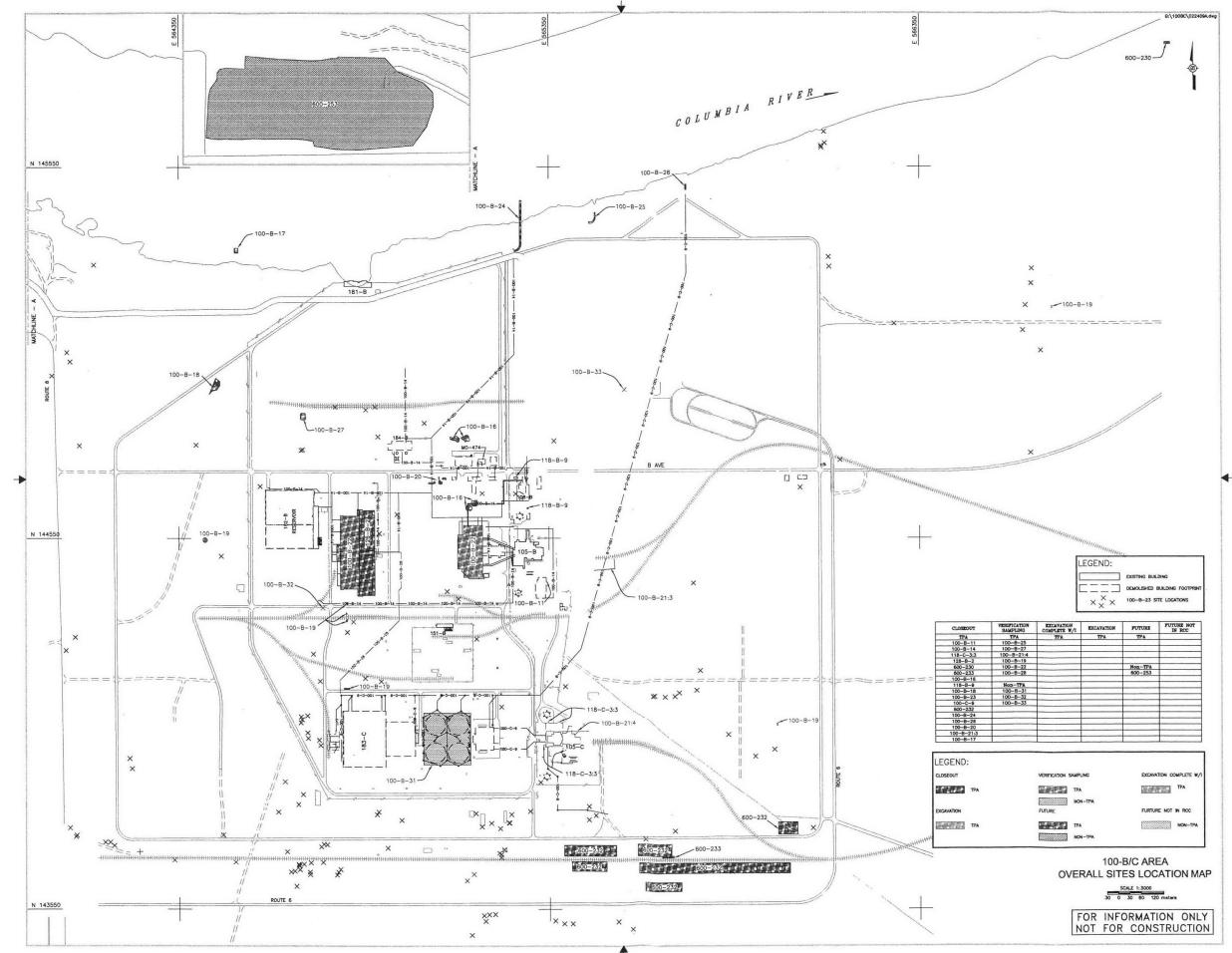
Bearly Early Early Dur Start Finish 0 133EP10A 130CT10A 13 180CT10 08NOV10	FY12
Dur Start Finish 0 13SEP10A 13OCT10A 13 18OCT10 08NOV10	O N D J FY12
0 13SEP10A 13OCT10A 13 18OCT10 08NOV10	
0 13SEP10A 13OCT10A 13 18OCT10 08NOV10	
8 21OCT10 03NOV10	
35 04NOV10 12JAN11	
2 21DEC09A 18OCT10	
4 190CT10 250CT10	
17 08JUN10A 11NOV10	
8 15NOV10 30NOV10	
]
17 08JUN1	4

ACTIVITIES / ACTIONS SUPPORTING SCHEDULE

Based on discussion with MSA, the export water line re-location effort will be accelerated, Target = complete by January 2011.

ISSUE / CONCERNS

Milestones	Due Date	Status
PM - 31	6/30/2013	6/30/2013 F



D4 300 Area

327/3723: All hotcells and above grade debris has been shipped to ERDF for disposal.

337/337B: Hazardous material removal except for asbestos lined tank in 337B basement has been removed. Both buildings have been demolished and await use as backfill in 315C. Tank to be moved to ERDF in January/February time frame.

309: Stack has been demolished and will be disposed at ERDF. Facility routines have been restarted to support dome and polar crane removal this winter.

3621D: Asbestos abatement continues. Crane to remove the generators from the facility has been partially delivered to town and requires state inspection as t s an out of state crane. Generators should be removed in December.

310/340: Facilities have been transferred to allow for demolition.

FR 300 Area

300-6: Excavation of the fuel oil tank spill at 384 excavation continues. This is anticipated to take an additional 3 weeks to complete.

300-28: Waste sites under Ginko Street have been partially remediated.

300-15: Excavation of potions of the process sewer near 303J and 300-6 has begun

Clarification of WAC-173-340-740(7)(e)(1996) Implementation

On September 14, 2010, RL and Ecology met to discuss application of the "3-Part Test" in determining whether interim remedial action goals (RAGs) have been achieved. It is recognized that, when using maximum values from a data set, attainment of interim RAGs is not affected by performing the 3-part test evaluation- use of a maximum value for comparison is at least as conservative as other parts of the evaluation. However, to supplement implementation of WAC-173-340-740(7)(e)(1996) as described in Section 3.6.5 of the *Remedial Design Report/Remedial Action Work Plan for the 100 Area* (DOE/RL-96-17) the following clarifications will be incorporated with the existing 3-Part Test evaluation discussions in 100 Area closure documents at the request of the lead regulatory agency.

 An example of the text that will be added to the closure document when using focused sampling results to evaluate data against the interim RAGs is provided below:

A three-part evaluation was also performed for focused sampling results. Table X presents the maximum value associated with each detected constituent. <Refer to focused sample summary table in 95% calc brief. Note that this table does NOT show results of comparison against the 3-part test, only max results>. Maximum results for copper, lead, and zinc exceed soil RAGs for groundwater and/or river protection. Because the data set for each focused sample consists of one sample, greater than 10% of the data for these analytes also exceed the same RAG values. Only the lead results exceed more than twice the lowest RAG value (for groundwater and river protection). As discussed previously, none of these constituents is expected to migrate more than....<standard analogous model language>.

 An example of the text that will be added to the closure document when using the maximum value from statistical sampling results (due to data censorship) to evaluate data against the interim RAGs is provided below:

An additional application of the three-part test is included for the statistical data sets which default to the maximum because less than half of the data set was detected. As shown in Table B-? <Refer to the table in the 95% UCL calc which compares maximum values to RAGs and shows the results of the 3-part test>, the results of this evaluation indicate that all residual COPC concentrations pass the three-part test in comparison against applicable RAGs, except for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and silver in comparison against the soil RAGs for groundwater and/or river protection in one or more sampling areas. However, as described above, residual concentrations of these COPCs will not migrate to groundwater within 1,000 years, and are therefore protective of groundwater and the Columbia River.

Environmental Protection Mission Completion Project October 14, 2010

Orphan Sites Evaluations

- The 300 Area Orphan Sites Evaluation Report, Revision 0 was issued in early-October.
- The Draft A 400 Area Orphan Sites Evaluation Report is currently under review.
 Comments from RL were received in early-October. Comments from EPA are still pending.
- Continued drafting the 100-F/IU-2/IU-6 Area Segment 3 Orphan Sites Evaluation Report. The report will be transmitted to RL and EPA review in November.
- Completed the historical review task and are continuing the field investigation task for the 100-F/IU-2/IU-6 Area Segment 4.
- Initiated the historical review task for 100-F/IU-2/IU-6 Segment 5.

Long-Term Stewardship

 Continued working with RL, MSA, and CHPRC in regards to the Segment 1 turnover package to support transition of interim surveillance and maintenance responsibilities between contractors.

River Corridor Baseline Risk Assessment

- Volumes 1 (ecological) and 2 (human health) of the risk assessment report are being developed to reflect RL pre-concurrence review comments.
- The anticipated submittal for the Draft B RCBRA report is November 2010.

Remedial Investigation of Hanford Releases to Columbia River

- The data summary report is under development and anticipated to be issued in late-October 2010.
- Continuing to develop Human Health and Ecological risk assessments.

Document Review Look-Ahead

Document	Regulator Review Start	Duration
River Corridor Baseline Risk Assessment Report	November 2010	45 days
100-F/IU-2/IU-6 Area – Segment 3 Orphan Sites Evaluation Report	November 2010	45 days